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NORRIS, MCLAUGHLIN & MARCUS, P.A. 875 THIRD AVE 18TH FLOOR NEW YORK, NY 10022			CHAN, SING P	
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**GROUP 1700**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/698,404  
Filing Date: October 27, 2000  
Appellant(s): SCHÜMANN ET AL.

\_\_\_\_\_  
William C. Gerstenzang  
For Appellant

### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed December 21, 2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Claimed Subject Matter***

The summary of claimed subject matter contained in the brief is correct.

**(6) *Grounds for Rejection***

The appellant's statement of the grounds for rejection in the brief is correct.

**(7) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) *Prior Art of Record***

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5,686,179

Cotsakis et al

11-1997

Admitted prior art in Specification, Page 1, lines 33-35 and Page 2, lines 28-29

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-8 are rejected under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumann et al (U.S. 6,129,983) in view of Cotsakis et al (U.S. 5,686,179).

Regarding claim 1, Schumann et al discloses a self-adhesive tape. The adhesive tape is formed by using a two-part polyurethane composition comprising an isocyanate and a polyol. (Col 2, lines 21-38) The mixture is mixed in a planetary mixer and the mixture is cast on to cured adhesive composition on release paper or release film and is cured by passing the laminate through the drying tunnel at a constant speed. (Col 3, line 65 to Col 4, line 12) Schumann et al does not disclose mixing the components continuously, continuously applying the mixture to the release paper, and rolling the laminate at a winding station. However, mixing the components continuously, applying the mixture to the release paper, and rolling the laminate at a winding station is

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well known and conventional as shown for example by Cotsakis et al. Cotsakis et al discloses a method of forming a pressure sensitive tape. The method includes mixing the components in a continuous mixing extruder, continuously applying the mixture to the release paper, curing the mixture in a continuous oven, rolling the adhesive tape onto a tape core to form a tape roll. (Col 3, lines 37-61)

It would have been obvious to one skilled in the art at the time the invention was made to continuously mix the components in a continuous mixer, continuously applying the mixture to the backing material, curing the mixture in a continuous oven, rolling the adhesive tape onto a tape core to form a tape roll as disclosed by Cotsakis et al in the method of Schümann et al to form the tape efficiently, quickly, and with high output.

Regarding claims 2 and 3, Schümann et al discloses a second backing material with cured adhesive composition on the release paper or release film is applied to the first backing material. (Col 4, lines 4-8)

Regarding claim 4, Schümann et al discloses additive can be added to the polyurethane mixture; materials such as dye, (Col 3, lines 5-11) catalysts, (Col 2, line 53) and other additives. (Col 3, lines 24-31)

Regarding claim 5, Schümann et al discloses the polyurethane mixture is positioned on the adhesive layer on the release paper or release film. (Col 3, line 65 to Col 4, line 6)

Regarding claim 6, Schümann et al discloses the backing is a dehesive media. (Col 3, lines 65-67)

Regarding claim 7, Schümann et al discloses a double-sided self-adhesive tape.  
(Col 4, lines 13-18)

Regarding claim 8, Schümann et al discloses the dehesive media are release paper or release film. (Col 3, lines 65-67)

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schümann et al (U.S. 6,129,983) in view of the Cotsakis et al (U.S. 5,686,179) as applied to claim 6, and further in view of the admitted prior art.

Schümann et al as modified above is silent as to the dehesive media can also include woven, non-woven, and elastomer. However, it is well known and conventional to use backing that include woven, non-woven, and elastomer as shown for example by the admitted prior art. The admitted prior art discloses backing material include all material in web form such as woven, non-woven, and elastomers and the coating of these web form backing is well established for making self-adhesive articles. (See specification, page 1, lines 33-35 and page 2, lines 28-29)

**(10) Response to Argument**

4. In response to appellants' argument that Cotsakis et al is not a continuous process. The examiner considers the use of the continuous mixer extruder (Figure 2, elements 28) to mix the components such as base polymer mix, tackifier, plasticizer, and curing agent, a continuous process. This mixture is continuously mixed, extruded, and applied to a release paper. However, the process of preparing the base polymer mix is a batch process, which one in the art would prepare the base polymer mix in sufficient amount to allow a continuous process of mixing and forming the tape.

5. In response to appellants' argument that Cotsakis et al does not disclose forming a polyurethane backing and does not apply a backing to an adhesive layer, it is submitted that this argument constitutes a piece meal analysis of the rejection. The examiner relied on Cotsakis et al to provide the teaching of a continuous process of forming a tape. (Figure 2) The teaching for the formation of polyurethane backing and applying the backing to an adhesive layer is provided by Schümann et al. (Col 3, line 65 to Col 4, line 12) The combination of Schümann et al and Cotsakis et al discloses the instant invention.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. In response to appellants' argument that Cotsakis et al teaches rolling up uncured single-layered tape. The examiner relied on Cotsakis et al to provide the teaching of rolling up the backing of the tape after a curing step, (Col 8, lines 51-52) and Schümann et al to provide the teaching of curing the polyurethane backing through a drying tunnel. The combination of Schümann et al and Cotsakis et al provided the teaching of rolling up the tape after the curing step of the polyurethane backing, which provide a hardened polyurethane tape.

7. In response to appellants' argument that Schümann et al cures and stores his polyurethane backing for one week before applying the adhesive. Schümann et al

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discloses this process as an additional embodiment where the preferred process is to apply the adhesive onto release paper and dry and cure the adhesive, coat the polyurethane mixture directly onto the adhesive composition, and cure and dry the polyurethane composition. (Col 8, lines 18-31)

8. In response to appellants' argument that no person skilled in the art would ever combine the references, the examiner relied on Schümann et al to provide the teaching of forming a polyurethane backing and Cotsakis et al to provide the teaching of forming a tape backing with a continuous mixing and coating process. One skilled in the art would consider the two in the same field of endeavor such as forming tape backing and would combine them because of continuous mixing and coating process allow for high volume mixing of the components. (Cotsakis et al, Col 6, lines 18-20)

9. In response to appellants' argument that no person skilled in the art would think it possible to continuously form a polyurethane backing onto an adhesive and then wind it up without allowing several days for the polyurethane to harden. However, Schümann et al discloses the polyurethane backing is cured by passing the backing through a drying tunnel, which completely cures the polyurethane backing and allows the backing to be rolled up. (Col 4, lines 8-11)

10. In response to appellants' argument that the cited references teach away from the appellants' process. The combination of the reference does teach appellants' process and the argument of Schümann et al's teaching to cure and store the backing for one week before applying the adhesive is another less preferred embodiment.



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11. In response to appellants' argument that the references do not recite winding the tape up on a roll or the curing and storage of the tape prior to rolling it up. The examiner relies on Cotsakis et al to provide the teaching of winding up the tape after a curing step in a continuous process. (Col 8, lines 51-52) The combination of Schümann et al and Cotsakis et al provided the teaching of the instant invention.

12. In response to appellants' argument that the use of specific dehesive media in either references will not convert either of them to appellants' invention. The examiner relies on the admitted prior to provide the teaching of well known and conventional dehesive media and depends on the combination of Schümann et al and Cotsakis et al to provide the general teaching of the appellants' invention. The combination of Schümann et al and Cotsakis et al provide the teaching of instant invention.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

*Chen Sing P.*

spc

February 1, 2005

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